To: Libelo, Laurence[Libelo.Laurence@epa.gov]; 'jennifer.field@oregonstate.edu'[jennifer.field@oregonstate.edu]; 'Chris Higgins'[chiggins@mines.edu]; Strynar, Mark[Strynar.Mark@epa.gov]; Lindstrom, Andrew[Lindstrom.Andrew@epa.gov]; Krasnic,

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(FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=4997AB5B3FB248E2B3DAB289ACD408B1-GAINES, LINDA]

Sent: Wed 3/7/2018 3:08:46 PM (UTC)
Subject: RE: fluorethers in AFFF???

Barzen-Hanson 2017.pdf

Laurence, I don't know. Nothing would surprise me about AFFF anymore. My question for Jennifer and Chris would be, would the non-targeted analysis performed in Barzen-Hanson et al. 2017 have detected fluoroethers? Is there another similar type article they can point us to that would have?

To the best of my knowledge, DoD is not looking for them at their AFFF sites, unless it is some research project that I would not know about.

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From: Libelo, Laurence

Sent: Wednesday, March 07, 2018 9:45 AM

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Subject: fluorethers in AFFF???

Hi Folks,

Do you know of any use of fluoroethers in AFFF. DuPont (and pretty much everyone else) patented fluoroether surfactants and says:

"...This property is of great importance in the use of water or foam formulations for fighting hydrocarbon fires since addition of proper amounts of esters of this invention to the water or foam formulation will allow them to spread in a film- 4 like fashion over the surface of the hydrocarbon thus may be found in US. Pats. 2,250,808; 3,274,239; and eliminating exposure of the hydrocarbon to the air and 3,322,826, and French Pats. 1,359,426 and 1,362,548. preventing reignition of the fire. ..,."

Did these get marketed? Has anyone looked for them in AFFF Sites? This is pretty much the same chemistry as the GENx related chemicals in NC and it would be good to know if it has been used in AFFF products.

Anyone know? Have you looked for the fluoroethers in AFFF samples? Any suggestions who might have info on this use?

Thanks.

Laurence